

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

ARNOLD SOMMERFELD CENTER FOR THEORETICAL PHYSICS



Arnold Sommerfeld Lecture Series

Professor Christopher Jarzynski University of Maryland

Theory Colloquium:

Scaling Down the Laws of Thermodynamics

Thermodynamics provides a robust conceptual framework and set of laws that govern the exchange of energy and matter. Although these laws were originally articulated for macroscopic objects, nanoscale systems also exhibit "thermodynamic-like" behavior – for instance, biomolecular motors convert chemical fuel into mechanical work. To what extent can the laws of thermodynamics be scaled down to apply to individual microscopic systems, and what new features emerge at the nanoscale? I will describe some of the recent progress and challenges associated with addressing these questions.

Wednesday, November 20, 2019, 4.15pm, Room A348, Theresienstr. 37, LMU

Prof. E. Frey